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CLASSIFICATION S-E-C-R-E-T
SECURITY INFORMATION
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REPORT NO.

CD NO.

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WHERE PUBLISHED	Moscow/Leningrad	NO. OF PAGES	5
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SOURCE Doklady Akademii Nauk SSSR (Novaya Seriya), 1948 - 1952.

PARTICIPATION OF A. N. TIKHONOV IN SOVIET ANTENNA AND WAVE-GUIDE RESEARCH

/Comment; Summary: The following list contains titles of articles published in the Soviet journal Doklady Akademii Nauk SSSR from 1948 to 1952. These articles, submitted by four academicians to the Academy of Sciences USSR, are devoted to research on the general subject of antennas and wave guides; most of them give credit lines to A. N. Tikhonov, geophysicist and mathematician, and Corresponding Member, Academy of Sciences USSR. It is to be noted that Tikhonov's own published works, as [redacted] give no indication that Tikhonov has been participating in research in the field of radiophysics.

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Listed in Group I (Items 1-13) are articles by physicist R. G. Mirimanov of the Institute of Automatics and Telemechanics, Department of Technical Sciences, Academy of Sciences USSR. Items 1-10 each give a credit line to Tikhonov. In Item 3, it is stated that the work was done at Tikhonov's suggestion, and in most of the earlier articles Tikhonov is thanked for giving suggestions as to the future direction of the research. Items 1 and 4-10 each give another credit line to academician B. A. Vvedenskiy, who is known for his work in radiophysics.

In Group II are listed an article by B. L. Rozhdestvenskiy (Item 14) and one by Rozhdestvenskiy and D. N. Chetayev, mathematician (Item 15). In both items, Tikhonov is given credit lines, and in Item 14 he is referred to as "directing this work." (CIA/CD 1, "Soviet Men of Science,") does not list a B. L. Rozhdestvenskiy. It does list a Lieutenant Colonel Rozhdestvenskiy (fnu) connected with guided missiles and rockets. It should be noted that Rozhdestvenskiy is a fairly common family name in the Soviet Union.)

Group III lists three articles (Items 16-18) by A. G. Sveshnikov [redacted] All three give a credit line to Tikhonov, and Item 17 refers to him as "directing this work." Item 16 also contains a credit line to physicist A. A. Samarskiy of Moscow State University, whose wave-guide research dates back at least as far as 1947./

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Author	Title	Affiliation	Date of Submission to Editor	Periodical
		GROUP I		
Submitted by B. A. Vvedenskiy				
1. Mirimanov, R. G.	Solution of the Problems of Diffraction of a Plane Electromagnetic Wave from a Paraboloid of Revolution of Infinite Dimensions by Means of Laguerr's Function	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	17 Feb 48	DAN, Vol LX, No 2, p 203, 1948
2. Mirimanov, R. G.	Solution of the Problem of Diffraction of Spherical Electromagnetic Waves from a Paraboloid of Revolution of Infinite Dimensions	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	17 Feb 48	DAN, Vol LX, No 3, p, 357, 1948
Submitted by V. A. Fok				
3. Mirimanov, R. G.	Diffraction of Spherical Electromagnetic Waves Around a Circular Disk	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	9 Jun 48	DAN, Vol LXI, No 4, p 617, 1948
Submitted by B. A. Vvedenskiy				
4. Mirimanov, R. G.	A New Method for Solving Problems of the Reflection of Electromagnetic Waves from Thin Nonenclosed Surfaces of Finite Curvature	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	28 Mar 49	DAN, Vol LXVI, No 4, p 641, 1949

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5.	Mirimanov, R. G.	Diffraction of a Spherical Electromagnetic Wave from a Thin Spherical Segment	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	2 Apr 49	DAN, Vol LXVII, No 1, p 65, 1949
6.	Mirimanov, R. G.	Diffraction of a Spherical Electromagnetic Wave from a Paraboloid of Revolution of Finite Dimensions with the Exciting Field of the Dipole Located along the Axis of Symmetry of the Paraboloid	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	28 May 49	DAN, Vol LXVII, No 5, p 835, 1949
7.	Mirimanov, R. G.	Diffraction of a Spherical Electromagnetic Wave from a Paraboloid of Revolution of Finite Dimensions When the Exciting Field of the Dipole is Perpendicular to the Axis of Symmetry of the Paraboloid		28 May 49	DAN, Vol LXVII, No 6, p 1021, 1949
8.	Mirimanov, R. G.	The Solution of One General Problem in Applied Electro-dynamics	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	14 Feb 50	DAN, Vol LXXI, No 5, p 879, 1950
9.	Mirimanov, R. G.	Radiation Resistance of a Dipole Placed in the Center of a Thin Spherical Shell	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	14 Feb 50	DAN, Vol LXXI, No 6, p 1061, 1950

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10.	Mirimanov, R. G.	Diffraction of Spherical Electromagnetic Waves from a Thin Conical Surface of Finite Dimensions	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	26 May 50	DAN, Vol LXXIII, No 4, p 693, 1950
11.	Mirimanov, R. G.	Complex Radiation Resistance of an Antenna System When It Is in Electro-dynamic Interaction with any Other Antenna System		26 May 50	DAN, Vol LXXIII No 6, p 1177, 1950
12.	Mirimanov, R. G.	Radiation Resistance of a Dipole Close to a Highly Conductive Ellipsoid of Revolution	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	30 Jun 51	DAN, Vol LXXX, No 2, p 189, 1951
13.	Mirimanov, R. G.	One Method for Determining the Electromagnetic Field Inside a Closed Spherical Shell, Part of Which has a Different Dielectric Strength	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	30 Jun 51	DAN, Vol LXXX, No 3, p 361, 1951

GROUP II

Submitted by B. A. Vvedenskiy

14.	Rozhdestven-skiy, B. L.	Waves in a Plane Horn		5 Jan 51	DAN, Vol LXXVII, No 2, p 221, 1951
15.	Rozhdestvenskiy, B. L., Chetayer, D. K.	Problem of the Elimination of Reflections in Wave Guides with Changing Cross Sections		11 May 51	DAN, Vol LXXIX, No 3, p 427, 1951

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GROUP III

Submitted by I. G. Petrovskiy

16. Sveshnikov, A. G. — Principles of Radiation — 9 May 50 — DAN, Vol LXXXIII, No 5, p 917, 1950

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17. Sveshnikov, A. G. — Principle of Maximum Absorption for a Wave Guide — 25 Jun 51 — DAN, Vol LXXX, No 3, p 345, 1951

Submitted by S. L. Sobolev

18. Sveshnikov, A. G. — Principle of Limiting Absorption for a Meta-harmonic Equation — 9 Jul 46 — DAN, Vol LXXXVI, No 2, p 231, 1952

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